

intended to be exhaustive or to limit the invention to the precise forms disclosed. Many modifications and variations are possible in view of the above teachings. The embodiments were chosen and described in order to best explain the principles of the invention and its practical applications, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated.

What is claimed is:

1. A computing device, comprising:
a touch screen display;
one or more processors;
memory; and
one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including:
instructions for detecting one or more finger contacts with the touch screen display;
instructions for applying one or more heuristics to the one or more finger contacts to determine a command for the device; and
instructions for processing the command;
wherein the one or more heuristics comprise:
a vertical screen scrolling heuristic for determining that the one or more finger contacts correspond to a one-dimensional vertical screen scrolling command rather than a two-dimensional screen translation command;
a two-dimensional screen translation heuristic for determining that the one or more finger contacts correspond to the two-dimensional screen translation command rather than the one-dimensional vertical screen scrolling command; and
a next item heuristic for determining that the one or more finger contacts correspond to a command to transition from displaying a respective item in a set of items to displaying a next item in the set of items.
2. The computing device of claim 1, wherein the one or more heuristics include a heuristic for determining that the one or more finger contacts correspond to a command to translate content within a frame rather than translating an entire page that includes the frame.
3. The computing device of claim 1, wherein the one or more heuristics include a heuristic for determining which user interface object is selected when two user interface objects have overlapping hit regions.
4. The computing device of claim 1, wherein, in one heuristic of the one or more heuristics, a contact comprising a finger swipe gesture that initially moves within a predetermined angle of being perfectly vertical with respect to the touch screen display corresponds to the one-dimensional vertical screen scrolling command.
5. The computing device of claim 1, wherein, in one heuristic of the one or more heuristics, a contact comprising a moving finger gesture that initially moves within a predefined range of angles corresponds to the two-dimensional screen translation command.
6. The computing device of claim 1, wherein, in one heuristic of the one or more heuristics, a contact comprising a finger swipe gesture that initially moves within a predetermined angle of being perfectly horizontal with respect to the touch screen display corresponds to a one-dimensional horizontal screen scrolling command rather than the two-dimensional screen translation command.

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7. The computing device of claim 1, wherein, in one heuristic of the one or more heuristics, a contact comprising a simultaneous two-thumb twisting gesture corresponds to a 90° screen rotation command.

8. The computing device of claim 1, wherein, in one heuristic of the one or more heuristics, an N-finger translation gesture corresponds to a command to translate an entire page of content and an M-finger translation gesture corresponds to a command to translate content within a frame rather than translating the entire page of content that includes the frame.

9. The computing device of claim 1, including:

instructions for detecting one or more first finger contacts with the touch screen display while a web browser application is displayed on the touch screen display;

instructions for applying a first set of heuristics for the web browser application to the one or more first finger contacts to determine a first command for the device; and

instructions for processing the first command;

wherein the first set of heuristics comprises:

the vertical screen scrolling heuristic; and

the two-dimensional screen translation heuristic; and

instructions for detecting one or more second finger contacts with the touch screen display while a photo album application is displayed on the touch screen display;

instructions for applying a second set of heuristics for the photo album application to the one or more second finger contacts to determine a second command for the device; and

instructions for processing the second command;

wherein the second set of heuristics comprises:

the next item heuristic, wherein the respective item in the set of items is a respective image in a set of images; and

a heuristic for determining that the one or more second finger contacts correspond to a command to transition from displaying the respective image in the set of images to displaying a previous image in the set of images.

10. The computing device of claim 9, wherein the first set of heuristics comprises a heuristic for determining that the one or more first finger contacts correspond to a one-dimensional horizontal screen scrolling command rather than the two-dimensional screen translation command.

11. A computer-implemented method, comprising:

at a computing device with a touch screen display,

detecting one or more finger contacts with the touch screen display;

applying one or more heuristics to the one or more finger contacts to determine a command for the device; and

processing the command;

wherein the one or more heuristics comprise:

a vertical screen scrolling heuristic for determining that the one or more finger contacts correspond to a one-dimensional vertical screen scrolling command rather than a two-dimensional screen translation command;

a two-dimensional screen translation heuristic for determining that the one or more finger contacts correspond to the two-dimensional screen translation command rather than the one-dimensional vertical screen scrolling command; and